

REMARKS

By this amendment, claims 1-24 are pending, in which claims 5, 11, 17, and 23 are canceled without prejudice or disclaimer, and claims 1, 7, 12, 13, 19, and 24 are currently amended. No new matter is introduced.

The Office Action mailed February 13, 2006 rejected claims 1-24 under 35 U.S.C. § 102(e) as anticipated by *Schmidt* (US 2004/0203867) or *Sanqunetti* (US 6,983,202).

To advance prosecution, Applicants amended independent claims 1, 7, 12, 13, 19, and 24. Specifically, claims 1, 7, 13 and 19 now incorporate the features of dependent claims 5, 11 and 17, and 23 respectively, which recite “wherein the **coordinates include a hysteresis value that adds a predetermined area to the outer periphery of the boundary areas** once the tracked device is determined to be inside the boundary areas.” Independent claims 12 and 24, as amended, recite “the boundary information further includes **a hysteresis value specifying a buffer area to the boundaries.**”

With respect to *Schmidt*, for a supposed disclosure of “wherein the set of coordinates include a **hysteresis value** that adds a predetermined area to the outer periphery of the boundary area once the tracked device is determined to be inside the boundary area,” the Office Action (on page 4) refers to claims 2 and 3 of *Schmidt*. These claims are provided below (claim 1 is provided for completeness) (Emphasis Added):

1. A method for localization of a mobile end user unit by monitoring a geographical area utilizing a cellular communications environment, the method comprising the steps of:

defining a geographical monitoring area, the geographical monitoring area being a geographical area to be monitored;

mapping the geographical monitoring area to at least one cell of the cellular communications environment such that a geographical area corresponding to the at least one cell of the cellular communications environment comprises the geographical monitoring area;

identifying at least one cell of the cellular communications environment wherein the mobile end user unit is active; comparing the at least one identified cell and the at least one mapped cell; and

monitoring the geographical monitoring area on the basis of a result of a comparing step to localize the mobile end user unit.

2. The method of claim 1, wherein the defining step comprises:

moving the mobile end user unit in a geographical area at least partially corresponding to the geographical monitoring area.

3. The method of claim 1, wherein the **mapping step comprises:**

obtaining information characterizing geographical cell areas, **each geographical cell area being a geographical area corresponding to one of the cells of the cellular communications environment;** and

selecting at least one of the geographical cell areas such that the at least one selected geographical cell area comprises the geographical monitoring area.

Applicants do not understand how the claimed “hysteresis value” is disclosed based on the above claims of *Schmidt*. These claims merely define geographical cell areas in relation to the geographical monitoring area. The Examiner is reminded that 35 U.S.C. § 132 requires the Director to “notify the applicant thereof, stating the reasons for such rejection.” This section is violated if the rejection “is so uninformative that it prevents the applicant from recognizing and seeking to counter the grounds for rejection.” *Chester v. Miller*, 15 USPQ2d 1333 (Fed. Cir. 1990). This policy is captured in the Manual of Patent Examining Procedure. For example, MPEP § 706 states that “[t]he goal of examination is to clearly articulate any rejection early in the prosecution process so that applicant has the opportunity to provide evidence of patentability and otherwise respond completely at the earliest opportunity.” Furthermore, MPEP § 706.02(j)

indicates that: “[i]t is important for an examiner to properly communicate the basis for a rejection so that the issues can be identified early and the applicant can be given fair opportunity to respond.” Unfortunately, the Examiner’s only discussion of claim feature of “wherein the set of coordinates include a **hysteresis value** that adds a predetermined area to the outer periphery of the boundary area once the tracked device is determined to be inside the boundary area,” is a vague reference to claims 2 and 3 of *Schmidt*. It appears that the only part of the claim language that the Examiner has considered is “once the tracked device is determined to be inside the boundary area,” as *Schmidt* states “moving the mobile end user unit in a geographical area.”

Further, Applicants contend that *Schmidt* does not employ, and thus, cannot disclose “receiving, at the tracked device, a **set of coordinates** associated with a boundary area,” as positively recited in the claims. The Office Action (on page 3) states that *Schmidt* discloses, in the abstract and figure 12, performing location analysis within a tracked device by receiving, at the tracked device, a set of coordinates associated with a boundary area. Applicants respectfully disagree as *Schmidt* does not utilize “set of coordinates.” As seen in figure 12, the location analysis involves first defining a geographical area to be monitored (i.e., boundary area). The geographical monitoring area is then mapped to the geographic coverage of at least one cell of a cellular communications network. The *Schmidt* system operates as follows:

[0022] For mapping the geographical monitoring area to cells of the cellular communications environment it is possible to obtain information, for example from a provider or operator of the cellular communications environment, which characterizes geographical cell areas. Here, a geographical cell area refers to a geographical area covered by a cell of the cellular communications environment. Then, at least one of the geographical cell areas is selected in a manner that the selected cell(s) comprises the geographical monitoring area. In selecting geographical cell areas, it is preferred that no geographical cell areas are considered which do not comprise at least a part of the geographical monitoring area.

[0084] Data/information concerning a geographical area to be monitored can be stored in the area memory 10 by performing a monitoring area definition as

described below. Data/information concerning a geographical area to be monitored can be pre-stored in the area memory 10 during manufacture or it can be provided when the external monitoring unit 2 is purchased depending on the geographical area desired to be monitored. Further, it is contemplated that data/information concerning a geographical area to be monitored is stored in the area memory 10 via connector 4 by a system or unit capable of transferring such data to the external area monitoring unit 2. Suitable systems and units include personal computers and respective software programs being adapted to transmit such data/information via a respective connector or interface to the external geographical area monitoring unit 2. In the latter case, it is preferred that such systems and units for providing geographical area data/information are programmable to allow for different data/information to be stored in the area memory 10 for a variety of different applications.

The above passages describe that once the geographical monitoring area is defined, in order to map the geographical monitoring area to cells of the cellular network, information is obtained from a provider or operator of the cellular communications environment which characterizes geographical area cells. That is, information regarding which **cells** of a cellular communications network are **associated with the boundary area** is supplied to the tracked device, not **the coordinates of the boundary area**.

Thus, the rejection over *Schmidt* should be withdrawn, as *Schmidt* fails to disclose all the claim features.

Dependent claim 2 further recites “wherein the boundary is a geo-fence boundary comprising **a combination of circles and polygons.**” The Office Action (on page 3) asserts that the boundary of *Schmidt* is a geo-fence boundary comprising a combination of circles and polygons, referring to Figure 8. However, Figure 8 merely discloses that the geographical monitoring area is mapped onto circles, which are the geographical area covered by base stations. *Schmidt* does not disclose **polygons**.

As for the rejection over *Sanqunetti*, this reference also fails to satisfy the claimed invention. In support of this rejection, the appears to inadvertently state that “Schmidt” in col. 5, discloses that the set of coordinates include a hysteresis value that adds a predetermined area to

the outer periphery of the boundary area once the tracked device is determined to be inside the boundary area. Applicants assume that the Examiner intends to cite *Sanqunetti*. In pertinent part, col. 5 of *Sanqunetti* discloses the following:

Subsequently, the vehicle's position is determined using, for example, a Global Positioning System (GPS) satellite receiver. To determine whether the vehicle is located within a particular rectangle of the predefined route, the positional coordinates are then rotated by the angle α associated with the particular rectangle, and the rotated positional coordinates are compared with the stored rotated coordinates for the particular rectangle. Depending on the outcome of this comparison, the mobile or embedded device can (1) do nothing, (2) send a predefined response to a central monitoring location, or (3) check the current location versus another rectangle in the overall route. (col. 5: 1-12)

Within this passage (or any other passage within *Sanqunetti*), there is no mention of the claimed hysteresis value. The remaining passage of col. 5 discusses the process of performing rotational transformation of the coordinates. Again, the type of rejection contravenes 35 U.S.C. § 132. As anticipation under 35 U.S.C. § 102 requires that each and every element of the claim be disclosed in a prior art reference, based on the foregoing, it is clear that *Sanqunetti* fails to anticipate the claimed invention.

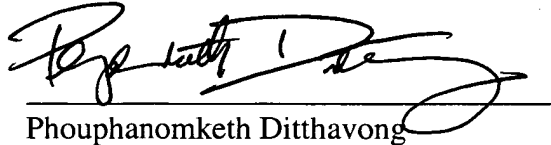
As for the feature of “wherein the boundary is a geo-fence boundary comprising a combination of circles and polygons,” the Office Action refers to cols. 1, 2 and 4. A study of these passages reveal no such disclosure. At best, *Sanqunetti* discloses the strict use of polygons, without circles (see e.g., FIG. 1).

Therefore, the present application, as amended, overcomes the rejections of record and is in condition for allowance. Favorable consideration is respectfully requested. If any unresolved issues remain, it is respectfully requested that the Examiner telephone the undersigned attorney at (703) 425-8508 so that such issues may be resolved as expeditiously as possible.

Respectfully Submitted,

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Date


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